WTCI-557-P

889-15

THE PORT AUTHORITY OF NY & NJ Memorandum

Refer To	Date	Noted By	Date
Return To		File	

om: Stephen Berger, Executive Director
ile: Victor T. Strom
bject: October 3, 1986
WORLD TRADE CENTER - ASBESTOS MANAGEMENT PLAN
ference:
opy To: P. Falvey, S. Frigand, L. Liburdi, R. Monti, G. Tozzoli, J. Vanacore, B. Weintrob

This report will summarize the status of the ongoing project to determine where asbestos is present in The World Trade Center complex and to develop appropriate asbestos mitigation plans for this facility.

Staff of the Inspection and Safety Division of the Public Safety Department, working together with WTC Operations personnel, have now completed an examination of approximately 50% of the floors in Towers 1 and 2, subgrade areas and the Northeast and Southeast Plaza buildings to determine if asbestos is present in pipe covering, in underfloor truss fireproofing or on other surfaces.

FINDINGS

Floors 9 - 40 in Tower #1 have been known to have asbestos for many years, inasmuch as asbestos was the insulating material of choice prior to the 1970 discovery that airborne asbestos created a substantial environmental health hazard. This material was encapsulated as part of the original installation. Fear expressed by maintenance contractor's staff of the possible presence of asbestos fireproofing materials in mechanical equipment rooms in Tower #2 of The World Trade Center caused us to initiate our investigation of all areas. The investigation revealed that there is a significant presence of asbestos in the mechanical equipment rooms on floors 7 and 41 of both Towers, in the operation areas of floors 1 - 8 in both Towers, as well as in the subgrade areas. There were indications of fireproofing materials containing small percentages of asbestos (1 - 10%) in some floors in the 2nd and 3rd zones of Tower #1 and in all three zones in Tower #2, in addition to areas in the Northeast Plaza Building. The asbestos content in this material was extremely low compared with the material used for fireproofing in the 1st zone of Tower #1 where the asbestos percentage was between 30% and 60%. However, guidelines issued by the United States Environmental Protection Agency require that any material containing more than 1% of asbestos by weight be categorized as asbestos for control and mitigation purposes.

Because of staff's concern over the presence of asbestos in the 1st zone of Tower #1, the Inspection and Safety Division has over the past several years monitored the air in that zone for asbestos fibers. Of significant note is that despite the presence of material with a high percentage of asbestos in the 1st zone of Tower #1, there has never been a single instance in which a test of the air has revealed the presence of airborne asbestos in excess of the standard promulgated by OSHA.

PLAINTIFF'S EXHIBIT Px-1093

THE MITIGATION PLAN

Discovery

The Inspection & Safety Division will continue bulk sampling tests for asbestos on all floors of the two Towers as well as in the Northeast and Southeast Plaza Buildings. Findings of all tests will be recorded on floor plans, which will show the precise location of each sample taken and whether or not the sample was positive. Where asbestos is found, we will know the type of asbestos, the percentage and the surface condition of the insulating material. The survey work should be concluded by year end 1986.

Priority for investigation will be given to the NY State floors 23-74 in Tower 2 to enable World Trade staff to determine immediately whether there is asbestos in the hung ceiling of floors being vacated by the State.

Control or Removal

The publication, "Guidance for Controlling Asbestos-Containing Materials in Buildings," issued by USEPA in June, 1985, and known as The Purple Book, provides various options in dealing with existing asbestos in buildings which include special operations and maintenance programs, encapsulation with sealants, enclosures, and removal. The revised Occupational Safety and Health Act (OSHA) regulations issued in The Federal Register in June, 1986 specify the precautions to be taken when workers may come into contact with existing asbestos materials. These OSHA regulations will be in effect in January, 1987. Based on these regulations and guidelines, the following program is being put in place for The World Trade Center:

Operation and Maintenance

Staff and maintenance contractors are being advised of the asbestos findings as the information becomes available. Training programs are being set up to create both an awareness of the dangers of asbestos-containing materials and the safety precautions to be employed when working with or near these materials. In mechanical equipment rooms, we will specify:

- Vacuum all surfaces using HEPA (high efficiency particulate air) vacuums.
- Wipe down all surfaces with wet cloths.
- Tag and identify all asbestos insulation materials on piping.
- Establish an air monitoring program.

Tower No. 1 - Floors 9 - 40

Asbestos fireproofing will be removed from this zone which encompasses floors 9 to 40. This decision was based on the following business considerations and not on health concerns:

This area of The World Trade Center contains the highest concentration of asbestos used for fireproofing of the structural systems. In addition, these floors are generally occupied by several tenants. As individual tenants move out and new tenants move into the vacated space, alteration of the space for the new tenant becomes a major undertaking due to precautions required to protect the construction workers and other tenants on the same floor.

Because of these conditions, it is planned to remove the asbestos fireproofing from the steel trusses in these areas, a full floor at a time, and replace it with non-hazardous fireproofing materials. Existing fireproofing which is inaccessible because of exterior wall construction, or safely contained by an enclosure, will be left in place.

The first stage of this program will commence within the next few months with a contract for removal of asbestos fireproofing from floors 10 and 11. Cost for removal, temporary moves of tenants and re-fireproofing trusses is roughly estimated at sixty million dollars for this zone.

Tower No. 2 - NY State Floors

On floors where asbestos is determined to be present, removal will be undertaken in the interim between the time the State vacates the floors and new tenants take occupancy.

Tenanted Floors with Asbestos in Isolated Areas

On these floors we plan to:

- Initiate air monitoring program.
- When current tenant moves out, or airborne fibers reach the action level, i.e., half the permissible level, or when alteration work involves disturbance of asbestos, develop plans for containment or removal of asbestos as appropriate.

Customs Building

- The Law Department is evaluating what responsibility the Port Authority has, if any, with respect to the asbestos in the structure.

Hotel

- Although the hotel was constructed well past the early 1970's when prohibitions developed against the use of asbestos as a fireproofing material, samples of materials will be taken to confirm this premise.

AIR MONITORING

The Inspection and Safety Division is now in the process of expanding its air monitoring activities to include all areas where asbestos is found.

Victor T. Strom, Director
Public Safety Department